

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019297**Date Inspected:** 13-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shi Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 12BE/12CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated EP3005-001-013, Edge Plate I-rib splice. The welder is identified as #047353 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-ESAB.

Segment 12BE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3002M-090, Longitudinal Diaphragm to Bottom Plate hold back weld. The welder is identified as #040458 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-ESAB.

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This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated EP3005-001-009, 011, Edge Plate I-rib hold back weld. The welder is identified as #040353 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132-ESAB.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated LD3010-058, Longitudinal Diaphragm horizontal stiffener hold back weld. The welder is identified as #044504 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated LD3010-059, Longitudinal Diaphragm horizontal stiffener hold back weld. The welder is identified as #044504 and was observed welding in the 4F (overhead) position using approved Welding Procedure Specification WPS-B-P-2114-FCM-1.

Segment 12CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3002M-090, Longitudinal Diaphragm to Bottom Plate hold back weld. The welder is identified as #040458 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-ESAB.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated EP3006-001-001, 003, Edge Plate I-rib hold back weld. The welder is identified as #040353 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132-ESAB.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated LD3012-027, Longitudinal Diaphragm horizontal stiffener hold back weld. The welder is identified as #044504 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated LD3012-026, Longitudinal Diaphragm horizontal stiffener hold back weld. The welder is identified as #044504 and was observed welding in the 4F (overhead) position using approved Welding Procedure Specification WPS-B-P-2114-FCM-1.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspector is identified as Liu Hua Jie. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Lift 11 East

This QA Inspector observed lift 11 East being loaded onto the transport ship.

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QA Verification

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ABF MT personnel. The following items were tested:

Deck Plate, Bottom Plate, Edge Plate (CB, BP side), and Side Plate (CB, BP side) transverse CJP splice

OBE12D-001

OBE12D-002

OBE12D-003

OBE12B-001

CA6502-007

CA6502-008

CA6502-009

OBE12-001

OBE12-002

OBE12-003

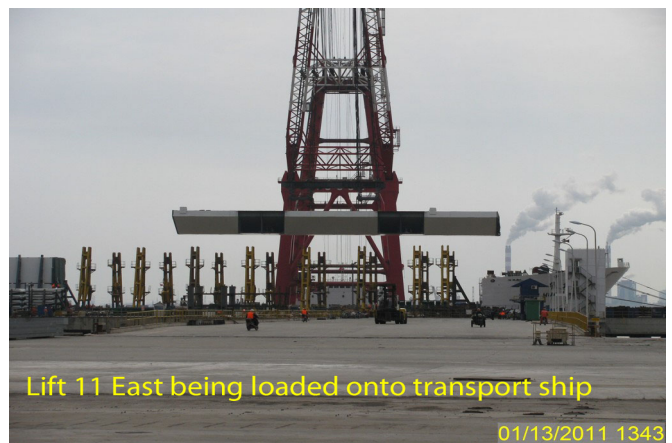
Plate Yard

This QA Inspector selected 1 (1) 460mm x 355mm plate check sample and assigned a QA Lot number to following sampled material:

Item 763: 45mm A709M-345F2-X, HT# 10402783N2, Lot# B222-001-11

Samples were marked with Lot number, Item number, material thickness, date and direction of rolling. Samples will be shipped to an Independent Testing lab.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
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Reviewed By:	Dsouza,Christopher	QA Reviewer
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